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can then be controlled on the basis of this gross weight value, without having to wait for the ride height control to inflate or deflate the air suspension to reach the desired ride height value for sensing the air bag pressure and thereby obtaining the gross weight. The look-up table 40a may be generated in a calibration process wherein the ride height is varied at different gross weights, and correlating pairs of sensor outputs from the ride height and air pressure sensors are noted for each loading state.

IN THE CLAIMS:

Please cancel claims 32-62 without prejudice or disclaimer, and add new claims 63-69, as follows:

63. (New) A load sensing system for a braking system of a vehicle having a vehicle body supported on a rear axle by a pressurized gas suspension system whose gas pressure is varied in dependence on the vehicle load, the load sensing system comprising:

a variable throttling valve having a valve member movable between minimum and maximum throttling positions to control the flow of a brake operating fluid to a brake actuator of the rear axle for applying braking force to a rear wheel of the vehicle;

a pressure sensor for detecting the gas pressure in the suspension unit;

a first air bag responsive to the gas pressure in the suspension unit and operable to urge the valve element towards its minimum throttling position;

a pressure regulator for supplying a reference fluid pressure at one of a plurality of predetermined reference fluid pressures;

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(31) ^{fig 3} ^{fig 5?}
control means operable to select one of said plurality of reference fluid
^{detected}
pressures on the basis of the sensed gas pressure in the suspension unit; and
^{26 fig 1} ^{26 fig 5}
a second air bag responsive to said selected reference fluid pressure and
operable to urge the valve element towards its maximum throttling position.

64. (New) The load sensing system according to claim 63, wherein the
pressure regulator is operable to supply first and second reference pressures, and the
pressure sensor provides a first output when the sensed pressure is below a
predetermined threshold and a second output when the sensed pressure is above the
predetermined threshold, and the control means is operable to provide the first
reference fluid pressure to the second air bag when the pressure sensor provides the
first output, and to provide the second reference fluid pressure to the second air bag
when the pressure sensor provides the second output.

65. (New) The load sensing system according to claim 63, wherein the
restoring force of the second air bag increases as the valve element approaches its
minimum throttling position.

66. (New) The load sensing system according to claim 64, wherein the
restoring force of the second air bag increases as the valve element approaches its
minimum throttling position.

67. (New) A vehicle including a load sensing system according to claim 63.

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